Summary of Testimony of Pat Wood, III

Chairman, Federal Energy Regulatory Commission Before the Subcommittee on Energy and Air Quality of the Committee on Energy and Commerce United States House of Representatives September 20, 2001

Our nation has been unalterably shaken by the terrorist attacks of September 11, 2001. Fortunately, our electric system remained secure during and after the attacks, which did not disrupt service in a broad regional area.

We must continue to take all appropriate security measures for existing infrastructure, but our best insurance policy is an expanded, adequate infrastructure with redundancy built into it. The uncertain path of industry restructuring since the passage of the 1992 Energy Policy Act has chilled investment in infrastructure. Investors are not eager to invest capital absent clear rules and assurance of cost recovery. This underinvestment in energy infrastructure undermines the potential for competitive markets to create significant customer benefits and compromises our reliability safety margin as well.

This will not change until we who work on behalf of the public declare an end to transition and inaction, clarify the rules for the future and let the industry members get back to work.

The crucial step in solving the security, reliability and effective market challenges is to recognize that electric power markets are regional, and so must be expanded and operated as regional entities. The Commission has been promoting the formation and development of a small number of regional transmission organizations (RTOs). These institutions will assure reliable minute-by-minute grid operations, optimize fair use of the "electric highway" by all users, plan for the future transmission needs of the region and ensure that long-term supply stays ahead of long-term demand. Over the long term, they will yield more reliable electric service and lower delivered energy costs.

What was a good idea for promoting competitive markets ten days ago is imperative for a reliable national power grid today. The cost of planning and executing the necessary level of security and infrastructure protection will be significant, and will require an expertise that only large, region-wide organizations can provide. If Congress asserts its preference for such organizations, it will forestall years of litigation and delay, save customers billions of dollars through greater competition, and most important, help rebuild to secure and reliable levels a bedrock industry that is crucial for our national economy and security.

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I. Introduction and Summary

Mr. Chairman and Members of the Subcommittee:

Good afternoon. Thank you for the opportunity to speak today on the role of competitive wholesale power markets in providing affordable, reliable electricity for customers, and the role of the Federal government in ensuring the continuing development of the industry. As an initial matter, I would like to talk about the issue that has been on my mind since the tragic events of September 11, 2001. Then, I will discuss the important near-term steps necessary for achieving a seamless nationwide power market that will provide customers the reasonably-priced and reliable service they deserve.

Our Nation has been unalterably shaken by the terrorist attacks of September 11, 2001. Fortunately, our electric system remained secure during and after the attacks. The attacks did not disrupt service in a broad regional area. Utilities quickly implemented their heightened security procedures. Many of these procedures are still in effect. And our existing independent transmission system operators (ISOs) in the Northeast were vitally involved in monitoring and maintaining transmission grid reliability in the stricken region.

A key question I have pondered is, can the electric power system sustain a terrorist attack? To be frank, in the face of an organized, well-financed, wide-spread effort to do harm, such a dispersed, highly visible and open system could suffer damage. The industry and its regulators are on alert and are taking many precautions, and the industry is working hard to anticipate and forestall such damage. Last week, the Commission issued a policy statement to its regulated industries stressing the importance of security measures and our willingness to consider exceptional cost recovery for unprecedented security-related expenses and investments.

While we must continue to take all appropriate security measures for existing infrastructure, our best insurance policy is redundancy. The electric power industry has had a long history of building sufficient additional infrastructure to handle unplanned contingencies. Over-design of the grid for double or triple failure contingencies and construction of excess generation capacity (reserve margin) have been historically effective ways to assure reliable performance through redundancy.

The extended and uncertain path of industry restructuring since the passage of the 1992 Energy Policy Act, though, has taken its toll on investment in infrastructure.

Investors have not been eager to invest capital where rules are unclear and cost recovery is uncertain. This under-investment in critical energy infrastructure undermines the potential for competitive markets to yield significant customer benefits (as we have seen in California) and diminishes our reliability safety margin as well.

This will not change until we who work on behalf of the public declare an end to inaction, clarify the rules for the future and get through this transition.

Some have argued for federalization of all of these issues; others have advocated leaving it at the state level. I believe, however, that the solution lies in recognizing that electric power markets are regional in their nature. For that reason, the Commission has been promoting the formation and development of a small number of regional transmission organizations (RTOs). These institutions, once formed, will assure reliable minute-by-minute grid operations, optimize fair use of the "electric highway" by all users, plan for the future transmission needs of the region and ensure that long-term supply stays ahead of long-term demand.

What was a good idea for promoting competitive markets ten days ago is imperative for a reliable national power grid today. Handling the basic RTO duties is challenging and expensive, but it's even more costly to society if these duties are on a utility-by-utility basis (if at all), as they are today. The costs of planning and executing the level of security and infrastructure protection that will be needed in the days and years ahead will be significant and will require expertise and sophistication that most individual utilities or even small, sub-regional groups of utilities cannot possess. This level of security and its cost demand a size and scope that only a large, region-wide organization with intentional redundancy and access to resources can provide.

Although the Commission decided in past years to move forward with RTO formation on a voluntary basis, the Commission can go further and require them. This may

be a moot point if the industry moves assertively forward to form RTOs that cover the nation's regional power markets. To the extent, however, that any party challenges this forward progress in courts, then Congress should make clear its intent that these organizations are its preference. This will save the industry four years in the courts, will ensure customers get the billions of dollars of savings that a competitive power market can deliver during that time, and most importantly, will rebuild to secure and reliable levels a bedrock industry that has suffered inadequate investment in the past decade.

II. Background

A. The Industry's Past

In the early decades of the industry, the transmission grid was much less developed than it is now, interconnections between utilities were fewer, and power supply was a local business. Government, customers and even utilities recognized that, based on the technology at the time, regulated monopolies were less costly than the turmoil of door-to-door competition. So, for many years after its inception, the electric utility industry was regulated comprehensively on a cost-of-service basis.

By the 1970s, however, the industry began to change. The energy crises of that decade led Congress to enact the Public Utility Regulatory Policies Act (PURPA).

PURPA encouraged the development of non-utility generators using cogeneration, renewable fuels or small power technologies. Regulated utilities were required to buy power from these non-utility generators so long as the latter met PURPA's ownership and

efficiency criteria. The rates for sales by the non-utility generators were based, not on their costs, but on the costs avoided by their utility buyers. Many regulated utilities began, for the first time, to face strong competition for the opportunity to generate the power needed by their retail customers. This also stimulated dramatic efficiency improvements in generation technology.

In the 1980s, the Commission further encouraged the development of competition. If a generator demonstrated that it and its affiliates lacked market power, the Commission allowed it to sell at market-based rates instead of cost-based rates. If the generator or its affiliates owned or controlled transmission facilities (a source of market power), the Commission authorized market-based rates only if other sellers were allowed to use the transmission facilities to compete for sales to wholesale customers.

In 1992, Congress enacted the Energy Policy Act, strongly endorsing competition in wholesale markets. Congress authorized an exemption from the requirements of the Public Utility Holding Company Act (the 1935 companion to the Federal Power Act) for companies selling power exclusively at wholesale. Congress also authorized the Commission to order utilities, on a case-by-case basis, to provide transmission service.

In 1996, the Commission adopted its Order No. 888, requiring all public utilities to offer nondiscriminatory, open access service over transmission facilities they own, control or operate. As a result of this service, most wholesale buyers and sellers now have more trading options than they had in the past.

These efforts by Congress and the Commission laid the groundwork for more competition in wholesale power markets. However, events in California and the West over the last eighteen months, and the notable lack of progress in other areas of the country outside the Northeast are strong proof that more needs to be done. Every day I hear from someone in the industry about the uncertain investment climate created by vague rules or incomplete policies, and that uncertainty does not help us achieve our societal goals.

B. The Industry's Future

Our goal is a seamless national power marketplace, and the Commission has chosen to realize this goal through the creation of regional transmission organizations. An RTO is an entity that is independent from market participants and operates (and also may own) the transmission grid for a large region of the country. A well-functioning RTO will serve a multi-faceted role, including transmission planning, assuring reliability of service and adequacy of supply, facilitating transparent power markets and monitoring behavior of market participants.

In late 1999, the Commission adopted its Order No. 2000, encouraging the formation of RTOs. If properly constituted and truly independent, RTOs can promote wholesale competition and, where states choose to pursue it, retail competition. RTOs can broaden the size of markets by eliminating "pancaking" of transmission rates. RTOs can offer "one-stop shopping" for transmission service across a large region, better manage transmission congestion and reliability, and facilitate transmission planning across a multistate region. By doing so, RTOs will allow buyers and sellers to have more trading

choices than they now have and deliver lower energy costs and greater short- and longterm reliability on the electric grid.

The Commission has endorsed the ultimate formation of four RTOs in its jurisdictional markets, three in the eastern United States (one in the Northeast, Southeast and Midwest) and one in the western United States. (The fifth RTO, the Electric Reliability Council of Texas Interconnection, is not in interstate commerce and is not under direct Commission jurisdiction.) However, we recognize that many obstacles must be overcome to reach this goal. In this regard, market participants in the Northeast and Southeast recently completed mediation on RTO formation, and the progress made during those discussions is encouraging. In the Midwest, two proposed RTOs have agreed on a framework for coordinating their services.

The issue now is whether, and how, more can be accomplished in the short-term. Perhaps the most difficult issues are in the western United States, because of the past eighteen months of problems in that region's markets. However, utilities and elected officials in the western United States have a strong tradition of region-wide cooperation and, in my view, this tradition will eventually support the formation of a region-wide RTO.

For Congress at this time, the guiding principle should be to reaffirm the development of a reliable and competitive wholesale market, thereby assuring customers of a supply sufficient to meet their energy needs at the lowest reasonable cost. This principle requires different approaches in the transmission and generation segments of the industry.

Transmission will have to remain regulated for the foreseeable future. Lawmakers and regulators should help ensure that transmission owners and operators have economic incentives to design, build, operate, and expand the transmission grid to meet the needs of all customers and other market participants.

In contrast, in the wholesale power sector, we need to rely on competition instead of traditional regulation wherever possible. Existing laws that hinder competition need to be modified or repealed. While the Commission stands ready to intervene in power markets when market rules or other factors lead to unjust and unreasonable prices, legislation reducing the existing barriers to entry and providing regulatory clarity will minimize the need for such efforts in the future.

Before addressing these issues in detail, however, I will discuss the events of last week as they relate to the Commission's responsibilities and, in particular, how they relate to RTOs.

III. Effects of the Terrorist Actions on Energy Supply

Our Nation's electric system remained secure during and after the September 11 terrorist attacks. Two substations in New York were crushed in the destruction of the World Trade Center towers. An additional substation was damaged. The local utility and its suppliers are working to replace the substations quickly.

Following the terrorist attacks, all electric utilities and generators have been in a heightened security condition. Understandably, utilities do not publicize their specific

activities and precautions. However, many rely upon procedures developed over the past several decades, including the Y2K preparedness plans. Generating stations implement higher security levels, normally unmanned substations and facilities are manned, and security centers go into "lock down" with regard to access. In some areas, there may be greater reliance on local generation over imports. Some utilities also check "black start" units (combustion turbines and hydro facilities used to restore power quickly) to make sure they are readily available, and test backup communications systems. Additionally, NERC put the nation's twenty-one grid security coordinators on full alert for several days.

The three ISOs operating the regional grids in the Northeast serve as security coordinators in their regions and were vitally involved in monitoring and maintaining grid reliability. Since late last week, security coordinators have participated in a daily secure telephone conference call with representatives of the U.S. Department of Energy and the North American Electric Reliability Council (NERC) regarding security threats to the electrical system. These calls will continue for some time.

Last week the Commission assured the companies we regulate (transmission-owning public utilities as well as gas and oil pipelines) that we will welcome applications to recover prudently incurred costs necessary to further safeguard the reliability and security of our energy supply infrastructure. The Commission's aim was to prevent uncertainty about companies' ability to recover these costs, especially for those operating under frozen or indexed rates. The Commission stated that companies may propose a

separate rate recovery mechanism, such as a surcharge to current rates or some other cost recovery method.

In the aftermath of last week's events, the media reported sharp price increases for gasoline in some regions. We have not seen comparable increases for natural gas or wholesale power, and prices for these commodities remain in the same range they have been in recent weeks. The increasingly-important power and natural gas trading operations across the country maintained their activities, even though the important NYMEX commodity operation in New York City was directly affected by the attacks there.

Last week's attacks prompted some to question whether we should continue to require transparency of transmission information to all potential transmission users. We require transmission providers to make available to traders an electronic bulletin board type service showing how much power can be moved from one grid location to another so they can reserve transmission capacity for trades. However, this requirement does not reveal the grid design, the locations of secure facilities, or important operational procedures. Thus, I do not believe our current transparency rules increase the vulnerability of the transmission grid to potential terrorist attacks.

Some also have asked whether having RTOs would help or hurt in the case of a terrorist attack. As I noted earlier, the three existing ISOs in the Northeast, which are precursor organizations to the RTOs we are trying to encourage, were critical to maintaining transmission grid reliability during and after the September 11 attacks. I therefore believe that last week's events demonstrate the effectiveness of RTOs and

strengthen the need for RTOs. An RTO can develop a comprehensive security plan for a large area, drawing on a broader array of electrical and human resources. Joint security plans for fuel supply controls, grid operation, and telecommunications can be coordinated with multi-state emergency authorities. Further, only one or two major control centers must be hardened for protection. Such modifications are less costly than similar modifications for many smaller control centers. Centralized authority and communications involve fewer parties, facilitating quick decisionmaking and dissemination of vital instructions. In a large RTO, one standard communications protocol can be used instead of having numerous protocols for many utilities.

IV. Other Reliability Risks

In addition to the national security issues outlined above, there are other reliability risks that need attention. The recent changes in the electric power industry have increased the incentives for, and frequency of, violations of reliability rules. As a result, the issue confronting the industry is whether federal action on reliability is necessary.

A number of credible parties have argued that the Commission cannot enforce reliability standards for users of the grid. Congress should remove any doubt in this crucial area and provide explicit authority. Cooperation among utilities ensured a reliable electric supply in the past, but with many new players now using the grid, mandatory reliability rules administered by the RTO and enforceable under government authority are called for. I have seen drafts from several parties in this regard and believe the simplest

solution may be the best. In 1999, Texas Governor Bush signed into law the following provision: "The commission may delegate authority to the [ERCOT ISO] to enforce operating standards within [ERCOT]." PURA sect. 39.151(i)

Absent clear federal authority to address reliability issues directly, the shortcomings of the traditional voluntary approach to reliability issues has driven some in the industry to seek other approaches. One option is to enforce reliability standards through contracts. Public utilities may voluntarily include reliability-related provisions in contracts or tariffs filed with the Commission because they affect or relate to the rates, terms and conditions of jurisdictional service. If reliability provisions in Commission-jurisdictional contracts are accepted and on file with the Commission, the Commission can enforce the reliability-related provisions against public utility parties to the contracts.

A system of such contractual arrangements has been established by utilities in the Western Systems Coordinating Council (WSCC), the regional reliability council for the Western United States. The effectiveness of the WSCC arrangement and the Commission's ability to enforce it have not been fully tested. But a voluntary contractual regime is not the simplest, fastest or most effective way to establish and adequately enforce reliability standards. It depends solely on the willingness of public utilities to make voluntary filings and, even then, it may not capture the electric facilities of non-public utilities. Reliability is at risk to the extent that not all market participants are covered by the same requirements.

Federal legislation is a better option. On May 17, 2001, the Administration released its National Energy Policy Report. The Report recommends that the President direct the Secretary of Energy to work with the Commission to improve the reliability of the interstate transmission system and to develop legislation providing for enforcement by a self-regulating organization subject to the Commission's oversight.

I believe a legislative approach is preferable to the contractual approach discussed above. I support streamlined legislation that gives the Commission authority to adopt and enforce reliability rules, and to give deference as appropriate to organizations that develop such rules. I believe that RTOs should play the central role not only in transmission access and planning but also in reliability, and that the Commission can and should defer to these organizations once they are up and running. But the Commission should retain oversight and enforcement responsibilities to assure that the nation's reliability needs and rules are effective and honored by industry participants.

Congress should understand that mandatory reliability rules alone are not enough to ensure the reliability of the grid. In its Order No. 2000 on RTOs, the Commission set out at length the need for an RTO to ensure reliability in each region. In particular, RTOs must have the authority to ensure the short-term reliability of the regional grid and must be responsible for planning, and for directing or arranging, necessary transmission expansion and upgrades that will enable it to provide efficient and reliable transmission service.

V. Transmission Jurisdiction

There are several other transmission-related steps Congress can take to promote competition in wholesale markets. First, Congress should strengthen the Commission's ability to create truly open, competitive wholesale electricity markets by recognizing that "separate but equal" transmission is inherently unequal. Transmission of electric power is interstate commerce and should be fairly recognized as such. And all users of transmission service should be treated equally, provided they pay for it. Further, there will remain barriers of cost, time and uncertainty that slow investment in generation and increase the cost of electricity. One need look no further than Chairman Barton's home state to observe the positive impact that having clear rules from a single regulator has had on needed investment and expansion of the grid.

Second, as stated in the introduction, it would significantly speed the advent of competitive markets if Congress clarified the Commission's authority to promote large RTOs. The Commission is moving aggressively to promote the formation of RTOs but a clearer statement of Congressional intent could help avoid years of lengthy litigation.

Third, it is important that federal tax laws not be used as excuses by certain market players to resist or hinder development of competitive power markets. In that regard, Congress should address the private use restrictions affecting public power and cooperatives and the tax disincentives for investor-owned utilities to transfer transmission assets to RTOs. The provisions passed by the House earlier this year in this regard are very important to ensure that expected customer benefits from competition are not offset by tax payments.

Fourth, explicit Congressional support for standardization of rules and procedures for interconnecting all new generation, including but not limited to small-scale distributed generation, would avoid years of costly litigation. This is a high priority goal of the Commission currently. Standardization will help minimize the costs and barriers for new generation, and clarification of the Commission's authority in this area will forestall the uncertainty of litigation about jurisdiction. The timely expansion of generation capacity achievable in this way will facilitate new entry into the markets and reduce prices for customers.

VI. Other Issues

A. Market Monitoring and Enforcement

Competitive markets do not just happen; they require ongoing oversight. In the context of wholesale power markets, the foremost component of effective oversight is regular monitoring of prices. When price changes are inconsistent with the operation of competitive markets, market monitors must inquire further and ensure that market participants are not engaging in anticompetitive behavior.

The Commission has required or authorized the existing ISOs to perform certain market oversight functions, such as data collection and initial analysis. In the future, this role should be performed by RTOs.

The Commission itself must make a stronger commitment to market monitoring. As Chairman, one of my goals is to work with my colleagues to strengthen the Commission's

market monitoring efforts. We must be vigilant and timely if we are to be effective. We intend to make that happen by changing our priorities and reallocating our resources. I will provide more detail to the Committee in the near future on our efforts in this regard.

Congress also can help. While the Commission can require refunds and impose civil penalties in certain circumstances under the FPA, both authorities are limited.

Currently, on refunds, section 206 of the Federal Power Act allows the Commission to require refunds for a 15 month period beginning 60 days after the filing of a complaint or publication of the Commission's initiation of an investigation. Section 5 of the Natural Gas Act does not contain a similar refund provision but permits rate changes on;y prospectively. Section 206 of the FPA also allows the Commission to change rates prospectively upon completion of the complaint or investigation proceeding.

Electric utility customers would benefit if the Commission had additional authority to order refunds. Congress should authorize refunds from the date of filing of the complaint or publication of the Commission's initiation of an investigation. Either of these events provides notice to market participants that their transactions may be modified after-the-fact, and allows market participants to modify their trading activity or knowingly accept the risk of rate uncertainty.

Congress also should expand the Commission's authority to impose civil penalties. Existing section 316A of the FPA allows the Commission to assess civil penalties of up to \$10,000 per day for the violation of limited provisions of the FPA (sections 211, 212, 213 or 214) or of any rule or order issued under those provisions. This section could be

extended to cover any violation of Part II of the FPA or any rules or orders issued thereunder.

B. Price-Responsive Demand

Effective markets balance supply with customer response, allowing for lower usage as prices rise. But in regulated retail electric markets, with their uniform rates, utilities have no choice but to buy or produce power, whatever the cost, and customers do not receive price signals about the true value of the energy they are using. The Commission will be working with the Department of Energy, RTOs and others to establish price-responsive demand mechanisms that reach a variety of customer groups and allow them to reduce their energy demand when prices are too high. This will reduce overall peak load levels, peak energy prices and supplier market power. I believe the Commission's present authority in this area is sufficient; but, to the extent this is questioned, statutory clarification would speed the implementation of this important demand-side mechanism.

C. PUHCA

The Public Utility Holding Company Act (PUHCA) requires registered holding companies to submit to extensive regulation by the Securities and Exchange Commission. PUHCA also generally requires holding companies to operate an "integrated" and contiguous system. As a result, PUHCA encourages concentrations of generation ownership and control in local markets that are inconsistent with competition, and discourages asset combinations that could be pro-competitive. PUHCA may also provide a significant disincentive for investment in independent transmission companies that would

qualify as RTOs. Under PUHCA, any entity that owns or controls facilities used for the transmission of electric energy -- such as an RTO -- falls within the definition of a public utility company, and any owner of ten percent or more of such a company would be a holding company and potentially could be required to become a registered holding company. This discourages investments in independent transmission companies that qualify as RTOs.

PUHCA was enacted primarily to undo harms caused by byzantine holding company structures that no longer exist. In the decades since PUHCA was enacted, utility regulation has increased substantially under the Federal Power Act, federal securities laws and state laws. PUHCA has outlived its usefulness, and now does more harm than good. PUHCA should be repealed.

D. PURPA

As noted earlier, PURPA was enacted in the late-1970s in the aftermath of that decade's energy crises. The legislation's goal was to remove impediments to the use of cogeneration and renewable-based generation, and promote their use by requiring utilities to buy this power at the utilities' avoided costs.

Today in many parts of the country, the impediments addressed in PURPA are gone (although other impediments may exist, such as the need for grid expansion). Also, PURPA's "forced sale" requirements are no longer necessary to promote the development of competition, in light of the availability of open access transmission, and more often serve to distort competitive outcomes. Congress should repeal PURPA but "grandfather"

existing PURPA contracts. To provide a smoother transition for parties which made investments under the expectations created by PURPA, it may be appropriate to limit its repeal to those states where all generation entities have the ability to sell their output to the widest possible range of customers.

E. Transmission Siting

Since the Commission adopted its open access requirements in 1996, the use of the interstate transmission grid has grown dramatically. Also, wholesale markets have become much more regional than local, encompassing large multi-state areas. Unfortunately, the grid has not been expanded commensurately. Thus, the grid increasingly is pushed to its operational limits. The risk of possible terrorist attacks against our energy infrastructure makes even more urgent the need for additional transmission capacity to protect against contingencies. Moreover, transmission constraints frequently prevent the most efficient use of generation facilities. The institutional structures for authorizing construction or expansion of transmission lines do not meet our needs.

Congress should provide a mechanism for ensuring timely action on transmission siting applications. It would add certainty to the siting process if a time limit were placed upon state-specific approvals, and a multi-state Section 209 Joint Board (drawn from states within the relevant RTO region) were set up as a backstop if the regulatory time limit (e.g., one year) is not met. To recognize the fact that the overwhelming number of transmission siting issues are dealt with expeditiously by states, it would be appropriate to limit this provision only to those projects deemed critical by the Secretary or by the RTO (unless the

states find regional transmission siting so efficient and effective that they choose to send more projects up to the regional board for handling).

VII. Conclusion

Well-functioning power markets depend on three key elements: adequate infrastructure, clear and balanced rules that allow efficient trading among market participants, and effective market oversight. Our goal is to use the authority and resources of the Commission to pursue this three-pronged strategy to facilitate robust wholesale electric competition that benefits customers across the country.

The Commission will continue to regulate transmission for the foreseeable future, while encouraging transmission to become more responsive to the needs of the market. The Commission also intends to monitor wholesale markets more proactively to anticipate many problems, and take aggressive actions where unforeseen problems occur, instead of waiting in the expectation that markets will always self-correct.

It has been a slow nine years since the President's father signed the 1992 Energy Policy Act into law. Its promises of a competitive electric power marketplace are still largely unfulfilled, and the slow transition is beginning to take its toll in unacceptable ways. I pledge to you my complete dedication to the task of making up for lost time and welcome your support.